

XII. *On a new genus and some new species of Copridæ*  
 (Coleoptera-Lamellicornia). By H. W. BATES,  
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A REMARKABLE Coprophagous Lamellicorn from Peru, which has long been known in the larger collections of London and Paris under the manuscript name of *Oruscatus rugicollis* of Reiche, has recently been the subject of some remarks by M. de Harold, who is known for his great special knowledge of this group of insects. The insect had previously been ascertained to be the *Phanæus Davus* of Erichson, who placed it in a distinct section of the genus, and noted the elongate fore-legs of the male. In fact, its facies differs considerably from that of *Phanæus*, and I was not a little surprised when so able an observer as M. de Harold, on examining specimens, came to the conclusion that it should not be separated from that homogeneous and well-defined genus. He cited in support of his view, the funnel-shaped club of the antennæ, and the absence of claws from the hinder tarsi, both of which are characteristic of *Phanæus*. The elongation of the anterior legs of the male he does not notice, but this feature is significant, taken with other characters, and shows that we have here to deal with a form quite foreign to *Phanæus*, and of the greatest possible interest, as supplying another link between that representative genus of the New World, and *Onitis*, an equally characteristic genus of the Old.

On an examination of four fresh specimens, I find that the antennal club of *Oruscatus* is not funnel-shaped in the sense understood when applied to *Phanæus*: the apical joint is as perfectly formed as the penultimate, is convex on its upper and concave on its lower surface, and the two are not immersed in the concavity of the first joint of the club. The club, in fact, is less funnel-shaped than in *Onitis*. The observation regarding the tarsal claws is correct. *Oruscatus* has no tarsal claws to the hinder legs, and the tarsi are wholly wanting in the fore-legs. A character of great value, as distinguishing the genus from *Phanæus*, is the shape and armature of the middle tibiæ; these are gradually dilated from base to apex, straight and dentate on the outer edge, similar to the

same members in *Onitis*, and totally different from *Phanæus*, where these tibiæ are narrow at the base, greatly dilated towards the apex, with the outer edge strongly incurved, and not toothed. The difference in the form of the anterior legs of the male would not strike an observer, perhaps, as very remarkable in *O. Davus*, but in a second and new species I have received from Equador (where it was captured by Mr. Buckloy's collector), it is striking and conclusive. In this species the anterior tibiæ are as much elongate as in *Bolbites onitoides*, and, like that species, have a tooth on their inner side about the middle.

I propose, then, to preserve, or rather (as no description has yet appeared) to institute, the genus *Oruscatus*, with the following characters:—

ORUSCATUS (Reiche, MS), nov. gen.

Corpus oblongum, robustum. Caput in utroque sexu transversim carinatum, genis ante oculos angulatis. Antennæ clava distincte triphylla, haud infundibuliforme. Pedes antici absque tarsis; tibiis anticis quadridentatis, ♂ valde elongatis intus ciliatis; tibiis intermediis extus rectis, dentatis; tarsis posterioribus quinque-articulatis, exunguiculatis.

1. *Oruscatus Davus*.

*Phanæus Davus*, Erichs. Consp. Ins. Coleop. Peru,  
p. 107.

Nigro-subcyanæus; thorace passim vermiculato-rugoso; elytris striatis, interstitiis alternis elevationibus.

♂. Tibiis anticis elongatis, intus ciliatis: thorace antice leviter transversim carinato.

♀. Thorace antice valde transversim carinato.

Long. 7-10 lin.

*Hab.*—Peru.

2. *Oruscatus opalescens*, n. sp.

Niger, suprâ nitore glauco-cæruleo indutus; clypeo obtuse bidentato; thorace medio lævi, lateribus minute granulatis; elytris sulcatis.

♂. Tibiis anticis valde elongatis, intus ciliatis, ante medium dente acuto armatis, intermediis calcare exteriore dilatato-hamato; thorace antice carina curvata.

Long. 11 lin.

Hab.—Equador: prope Cuencam.

I append descriptions of several new species of *Copridæ* in my collection, chiefly from the Amazons.

#### Gen. GROMPHAS.

##### *Gromphas amazonicus*, n. sp.

Niger, cæruleo vel viridi-tinctus, nitidus; capite crebre subtiliter rugoso-punctato, clypeo obtuse sex-dentato, fronte carina curvata medio magis elevato; thorace medio antice leviter elevato, subtiliter granulato, medio lævi, margine ante scutellum foveolis duobus obsoletis; elytris subtiliter punctato-striatis, interstitiis vix distincte punctulatis, basi haud depressis.

Long.  $7\frac{1}{2}$  lin. Lat. elytr.  $4\frac{1}{3}$  lin.

Hab.—Upper Amazons, Ega, St. Paulo, and Pebas.

Differs from *G. inermis* (Harold) in the more rounded outline, the elytra especially bulging towards the middle and narrowing thence to the apex, differently from *G. inermis*, in which they are nearly parallel. It is also distinguished by the distinctly marked striæ of the elytra, the smoother disc of the thorax, and more polished surface altogether. I do not find any sexual difference in the four specimens I possess; all have the spur of the anterior tibiæ obliquely truncate, and produced at the inner apex.

Obs.—Lacordaire describes *Gromphas* as having minute claws to the four hinder tarsi. I do not find in any of the three species I have examined any trace of claws; the terminal joint ends in a curved spine, but there are no true claws. The allied South American genus *Bolbites* has distinct claws.

#### Gen. DELTOCHILUM.

##### 1. *Deltochilum tessellatum*, n. sp.

Oblongum, viridi-cyaneum, vix nitidum; capite lato, clypeo medio dentibus duobus acutis modice inter se

distantibus, et latere utrinque unidentato; thorace lateribus valde angulatis, ante angulum profunde sinuatis, supra inæquali, punctato-rugoso; elytris carina forte humerali, lateribus solum unicarinatis, callo apicali valde quinque-tuberculato, supra rugosis, opacis, grosse striato-punctatis, spatiis inter puncta elevatis, politis.

♀. Metasterno polito, excavato; tibiis anticis extus serrulatis, posticis vix curvatis.

Long. 8 lin. Lat. elytr.  $5\frac{1}{4}$  lin.

*Hab.*—Gualaquiza, Equador (Buckley).

Allied to *D. Hyppona* (Buquet). The head is of very similar shape, and the two species agree in the outline of the elytra and form of the carinæ, but the wholly different colour and sculpture amply distinguish them. The curious notch in the edge of the thorax behind the anterior angle also distinguishes our species. In this feature, it seems to agree with *D. Burmeisteri* (Harold) which also inhabits Equador, but this latter species does not possess the glossy tessellate patches of the elytra, and is much larger (11-13 lin.).

## 2. *Deltochilum calcaratum*, n. sp.

Rotundato-ovatum, cupreo-fuscum, sub-opacum, supra creberrime granulatum; capite parvo, rotundato, clypeo dentibus duobus paulo distantibus; thorace lateribus angulato; elytris minus convexis, carina humerali brevi acuta, laterali prope basin duplici, callo apicali distincte quinque-carinato, supra punctato-striatis; corpore subtus nitido viridi-æneo.

♂. Pedibus anticis brevibus, simplicibus, tibiis curvatis, tibiis posticis gracilibus, curvatis, intus apice valde prolongatis, processu apice dilatato, obtuso; metasterno medio tuberculato.

Long. 7 lin. Lat. elytr.  $4\frac{3}{4}$  lin.

*Hab.*—Bahia. Collected by Mr. Reade.

Distinguished from all other species by the prolongation of the inner apex of the hind tibiæ, which forms a sub-spatulate process nearly as long as the tarsus, and is therefore more developed than the similar structure in *D. dentipes*, ♂. In general appearance it approaches *D. morbillosum*, but it is much broader in outline, the elytra being of very broad rounded form. The upper surface is opaque, owing to the minute and dense sculpture; on the head, this takes the form of very regular punctures,

on the thorax and elytra of minute oblong granules, with shallow circular pits in the interstices; the striæ are nearly as distinct as in *D. morbillosum*, and have large shallow distinct punctures.

### 3. *Deltochilum barbipes*, n. sp.

Oblongum, fusco-æneum, sub-opacum; capite rotundato, clypeo bidentato; thorace antice sub-angulatim dilatato, creberrime punctato et granulis nonnullis elevatis nitidis consperso, dorso postice longitudinaliter impresso; elytris humeris bicarinulatis, callo apicali quadricarinulato, lateribus bicarinatis, supra foveolato-striatis, interstitiis multipunctatis; pygidio æneo sparsim punctato; corpore subtus nigro, nitido.

♂. Trochanteribus et femoribus subtus fulvo-barbatis, tibiis posticis haud elongatis, sensim dilatatis.

Long. 6 lin. Lat. elytr.  $3\frac{3}{4}$  lin.

Hab.—Upper Amazons.

Similar to *D. submetallicum* in shape of body and head, but differing in the rows of large shallow foveolæ on the elytra, in the colour of the under-surface of the body, &c. The surface of the body is throughout minutely shagreened, and the foveolæ of the elytra have each in the centre an umbilicate prominence, which is the form also of all the other punctures; between the punctures are a number of shining spots, or granules, similar to those of the thorax. The thorax does not form a sharp angle at its dilatation, but is rounded. Seven examples, ♂ and ♀. A common species.

### 4. *Deltochilum aspericolle*, n. sp.

Sub-ovatum, fusco-cupreum, sub-opacum; capite rotundato, antice bidentato; thorace antice angulatim dilatato, supra crebre rugoso-punctato: elytris lateribus regulariter rotundatis, humeris indistincte bicarinulatis, callo apicali 4-tuberculato, lateribus bicarinatis, supra distincte foveolato-striatis, interstitiis dense punctatis; mesosterno cupreo, nitido.

♂. Femoribus posticis prope basin subtus abrupte dilatatis; tibiis apicem versus curvatis et dilatatis.

Long. 5 lin. Lat. elytr. 3 lin.

*Hab.*—Ega, Amazons.

The dilated sides of the thorax form a distinct angle, but the space between that and the anterior angle is quite straight; the surface is thickly and coarsely punctured, the punctures tending to confluence, without glossy granules in the interspaces. The rows of foveolæ of the elytra are very distinct, and lie in shallow furrows. A single male.

5. *Deltochilum femorale*, n. sp.

Ovatum, fusco-æneum; capite rotundato, bidentato; thorace angulatim dilatato, lateribus ante angulum sinuatis, supra creberrime punctato, punctis annulos nitidos formantibus, interstitiis opacis: elytris humeris bicarinulatis, lateribus bicarinatis, callo apicali tri-tuberculato, supra striatis haud foveatis, interstitiis multipunctatis; corpore subtus punctato, nigro, metasterno nitido.

♂. Femoribus posticis compressis, prope basin abrupte dilatatis, subdentatis; tibiis curvatis, apicem versus sensim dilatatis.

Long.  $4\frac{1}{2}$  lin. Lat. elytr.  $2\frac{3}{4}$  lin.

*Hab.*—Amazons; rather common.

Distinguished by its small size, the even surface of its thorax and elytra, without foveolæ or depressions, and especially by the sculpture, which consists of the usually shallow circular punctures, but each forms a shining ring, contrasted with the opacity of the rest of the surface. The inner carina of the elytra ends abruptly before the middle; in this respect it agrees with *D. aspericolle*, *D. fuscocupreum*, and *D. submetallicum*.

6. *Deltochilum fuscocupreum*, n. sp.

Oblongum, fusco-cupreum, vix nitidum; capite rotundato, clypeo dentibus duobus approximatis; thorace antice valde angulatim dilatato, ante dilatationem sinuato, supra crebro punctato, interstitiis dense nitide granulatis; elytris lateribus vix rotundatis, callo humerali bicarinulato, apicali quadrituberculato, lateribus bicarinatis, supra striatis et distincte lineatim foveatis, interstitiis punctatis; corpore subtus nigro-æneo, punctato, nitido.

♂. Pedibus robustis; femoribus posticis prope basin subtus dentatis; tibiis intermediis et posticis valde curvatis; tarsis crassis.

Long.  $5\frac{1}{4}$  lin. Lat. elytr. 3 lin.

Hab.—Upper Amazons.

Similar in its oblong form, colour, and sculpture to *D. barbipes*, but differs in the armature of the hind femora of the males, which have also no trace of the hairs which distinguish that species. Two males and one female.

### 7. *Deltochilum granulatum*, n. sp.

Oblongo-ovatum, fusco-cupreum; capite rotundato, antice bidentato; thorace antice modice dilatato, non angulato, lateribus ante dilatationem subrectis, supra creberrime granulato, granulis linearibus nitidis, interstitiis opacis, punctis annularibus indistinctis; elytris lineatim foveolatis, interstitiis inæqualibus punctatis et granulatis, callo humerali bicarinulato, apicali quadricarinulato, lateribus carinâ interiori usque ad apicem continuatâ; metasterno impunctato, nitido.

Long.  $5\frac{1}{2}$  lin. Lat. elytr.  $3\frac{1}{2}$  lin. (♀).

Hab.—Ega, Amazons.

Distinguished by the usual short inner carina of the elytra being continued, although less elevated, in company with a well-marked stria to the apex of the elytra. The elytra are uneven, with shallow wrinkles, besides the rows of foveæ which are much larger and more vague than in the common Brazilian *D. morbillosum*. I do not find a male example in my collection; two females agree exactly in their specific characters.

### 8. *Deltochilum sextuberculatum*, n. sp.

Ovatum, nigro-æneum: capite rotundato, antice bidentato: thorace antice valde angulatim dilatato, supra creberrime punctato, interstitiis opacis, sparsim nitide granulatis, linea dorsali impressa distincta: elytris lateribus rotundatis, callo humerali bicarinulato, apicali sextuberculato, lateribus bicarinatis, suprâ valde punctato-

striatis, interstitiis punctatis et nitide granulatis; corpore subtus metallico, punctato.

♂ (?). Pedibus simplicibus.

Long.  $4\frac{1}{2}$  lin. Lat. elytr. vix 3 lin.

*Hab.*—Pará.

I am not sure of the sex of my single example of this well-marked species. Judging, however, from the absence of the curved spine which distinguishes the inner apex of the anterior tibiæ of all the females of this group, I believe it to be a male.

9. *Deltochilum lætiusculum*, n. sp.

Ovatum, obscuro-cupreum, elytris viridescens; capite angulatim subrotundato, antice bidentato, supra nitido; thorace creberrime nitide granulato, interstitiis punctulatis, linea longitudinali lævi, lateribus angulatim dilatatis; elytris rotundatis, callo humerali obtuse bicarinulato, apicali quadrituberculato, lateribus bicarinatis, supra subsericeo-opacis, lineatim punctatis, interstitiis punctatis et granulatis; corpore subtus æneo, nitido, punctato.

Long. 6 lin. Lat. elytr. 4 lin.

*Hab.*—Ega, Amazons.

One example, ♀.

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